

FOUO 44-10507

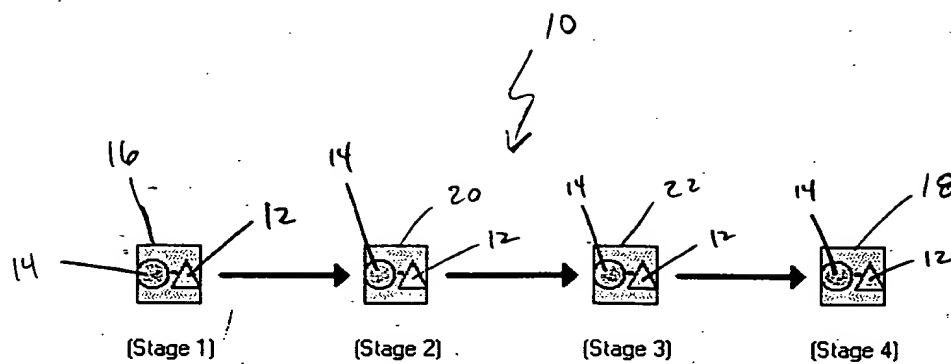


Figure 1

FIG. 2

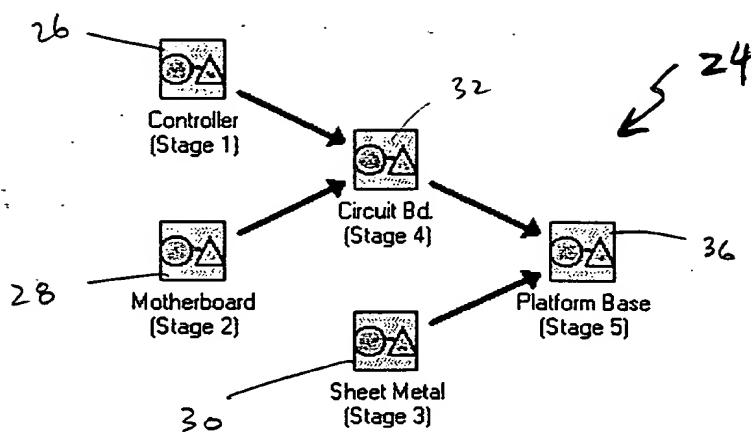


Fig. 2

FIG. 3

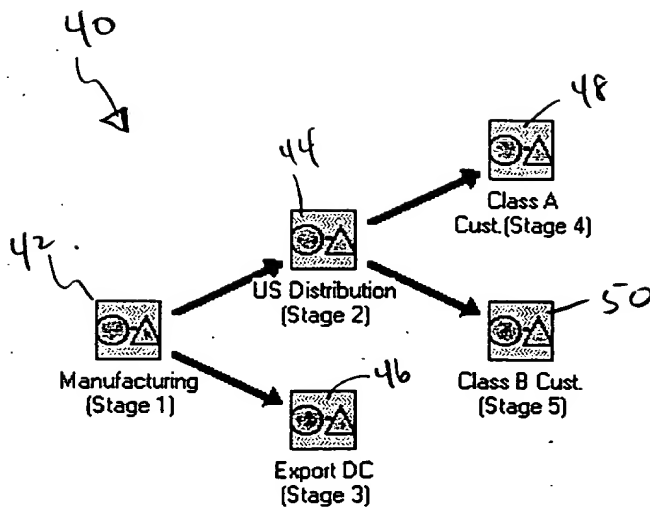


Fig. 3

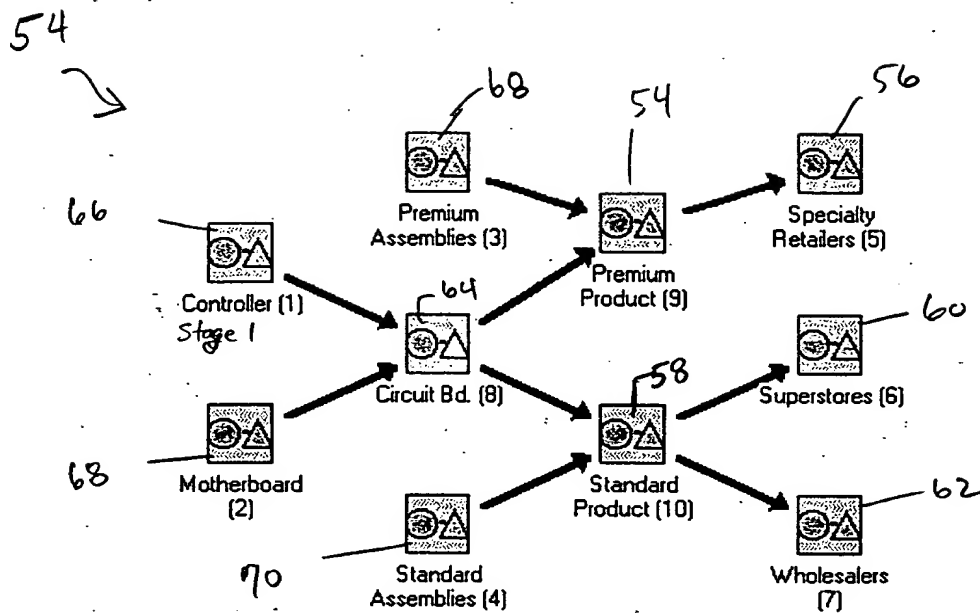


Fig. 4

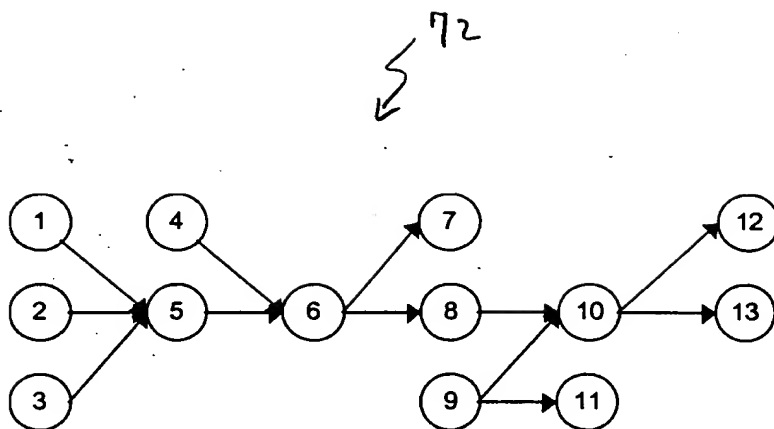


Fig. 5

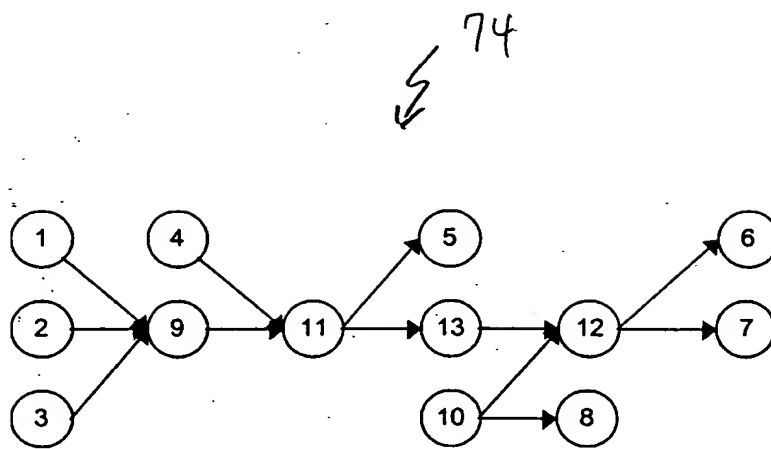


Figure 6

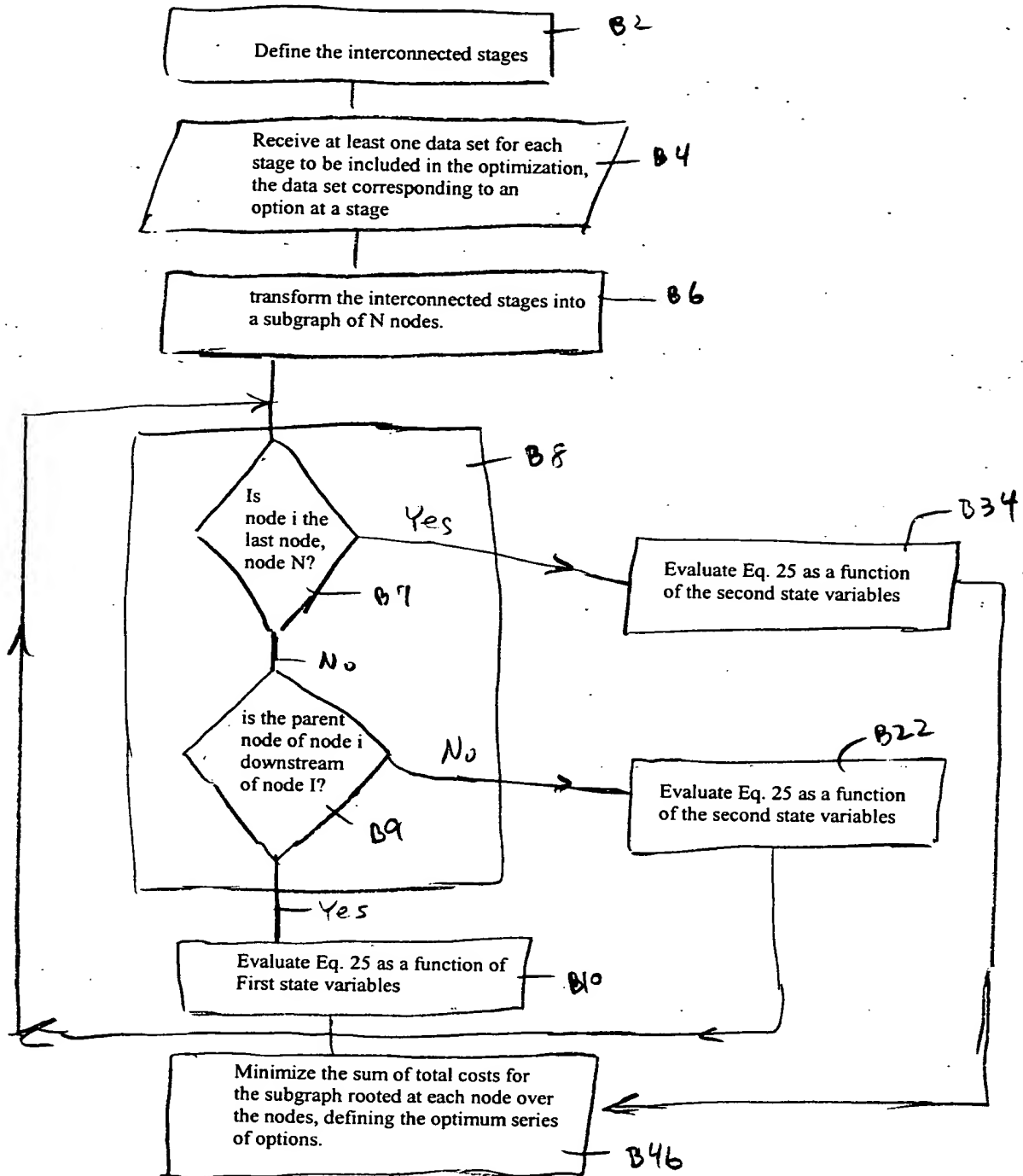


Fig. 7a

B10

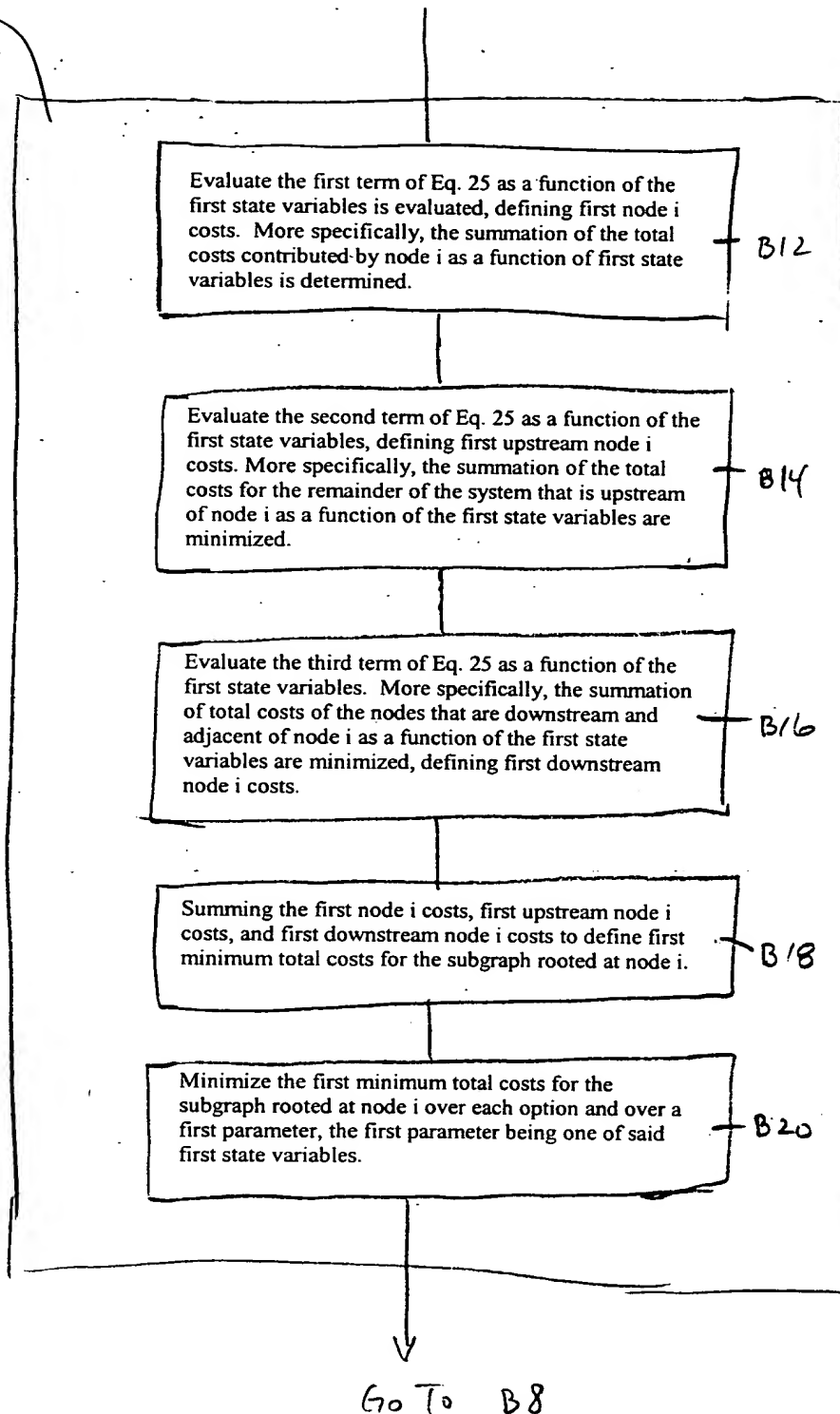


Fig. 7b

B22

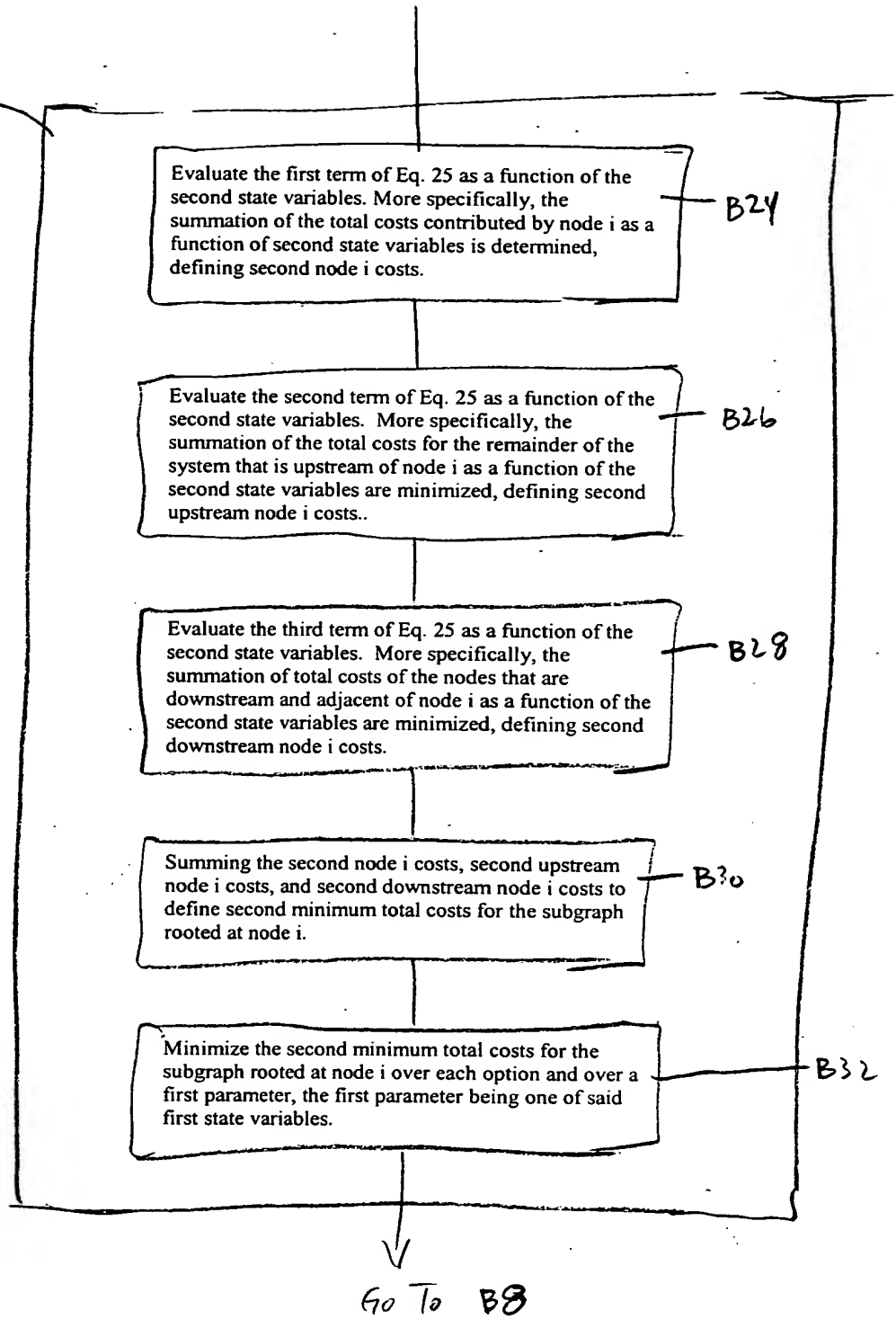


Fig. 7c

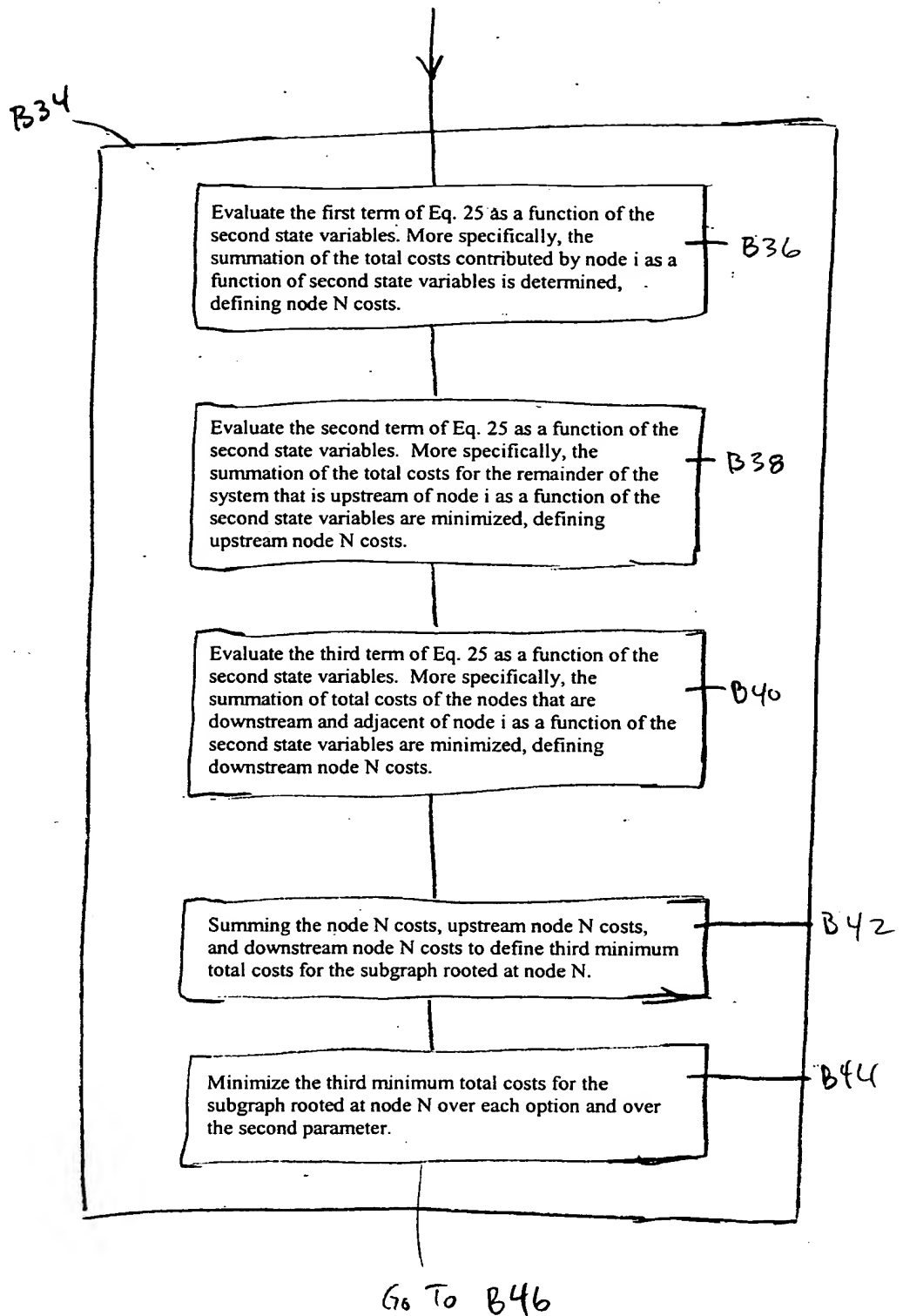


Fig. 7d

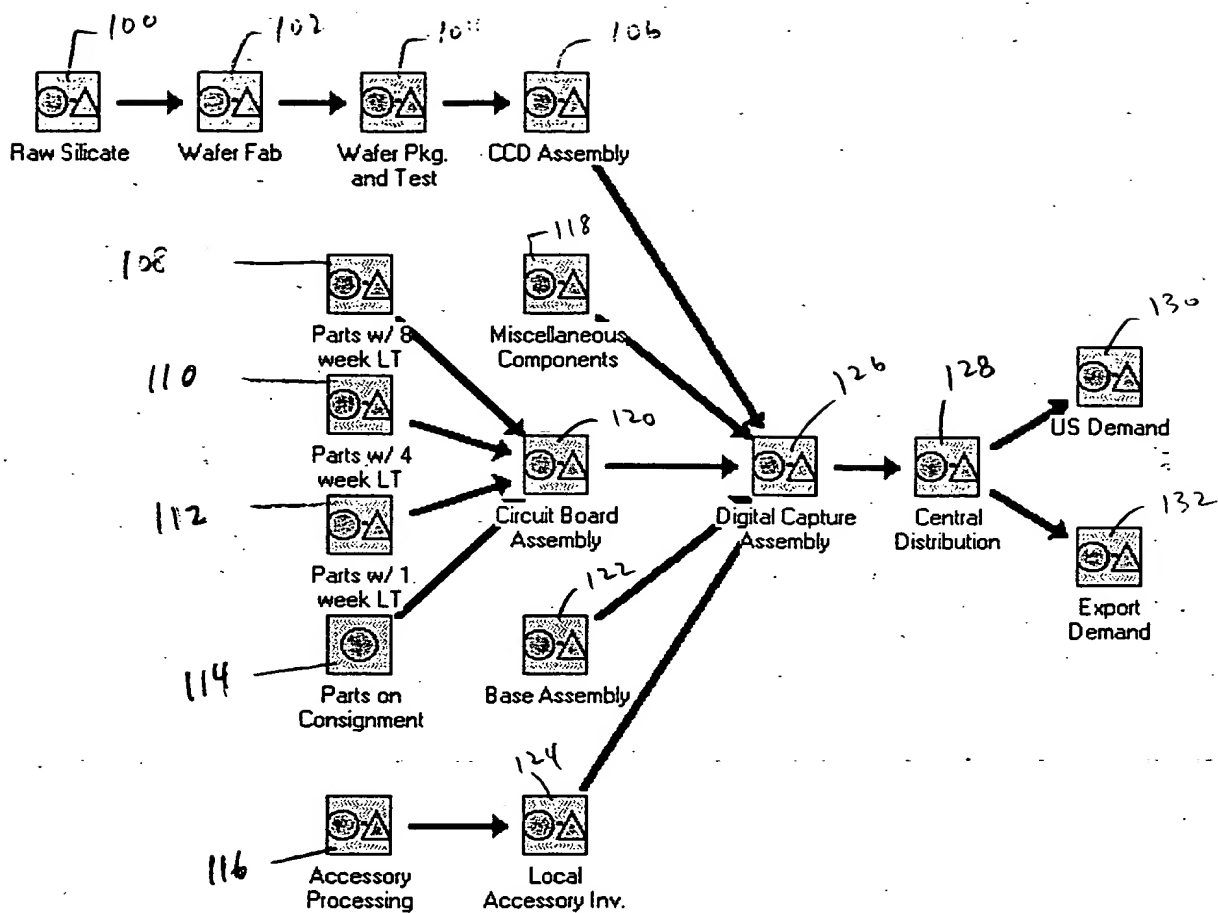


Fig. 8

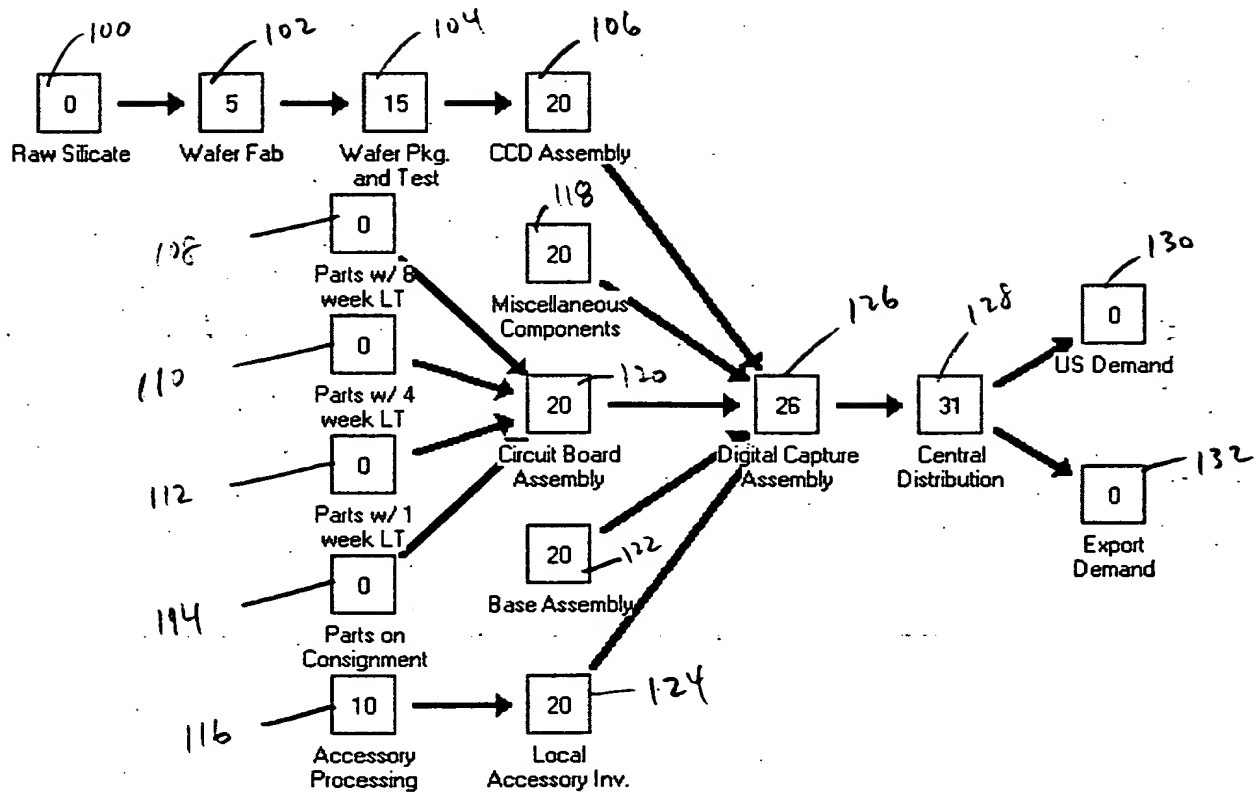


Fig. 9

105001-4442660

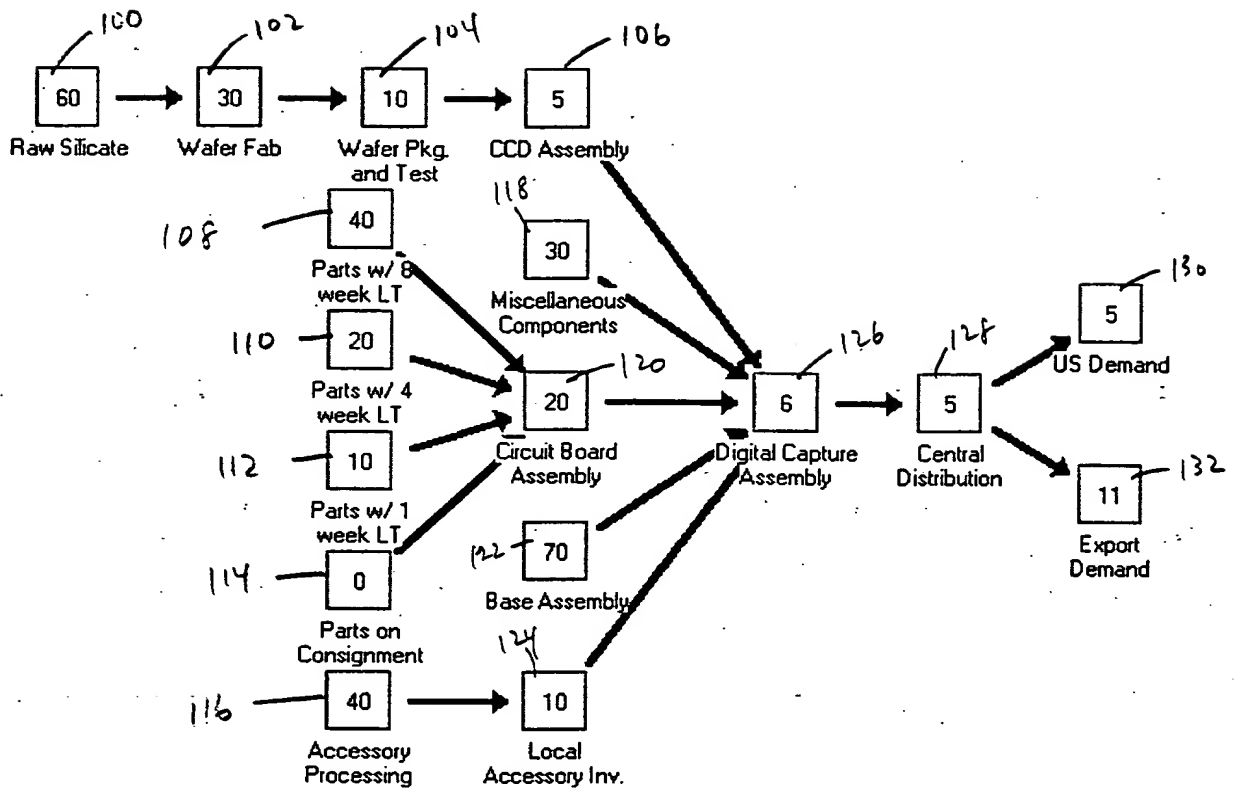


Fig. 10

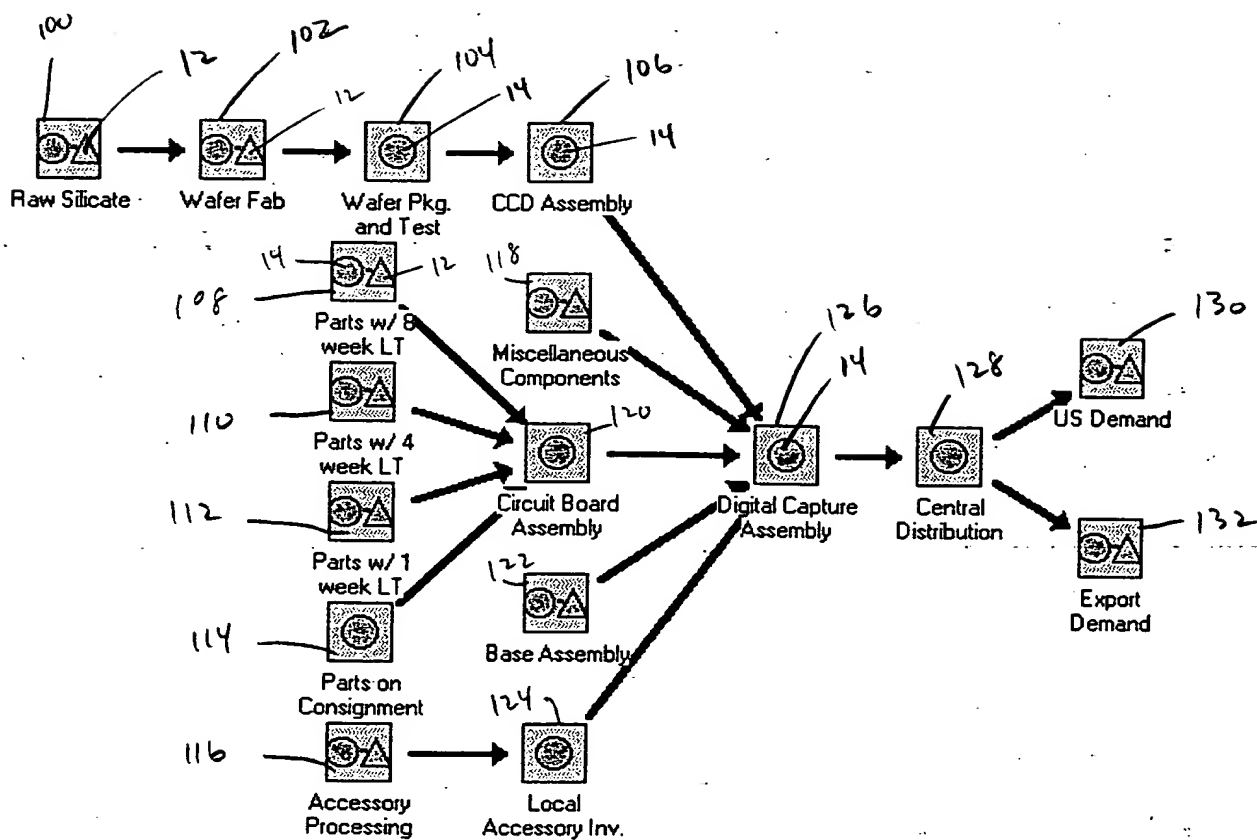


Fig. 11

105001-4FF2660

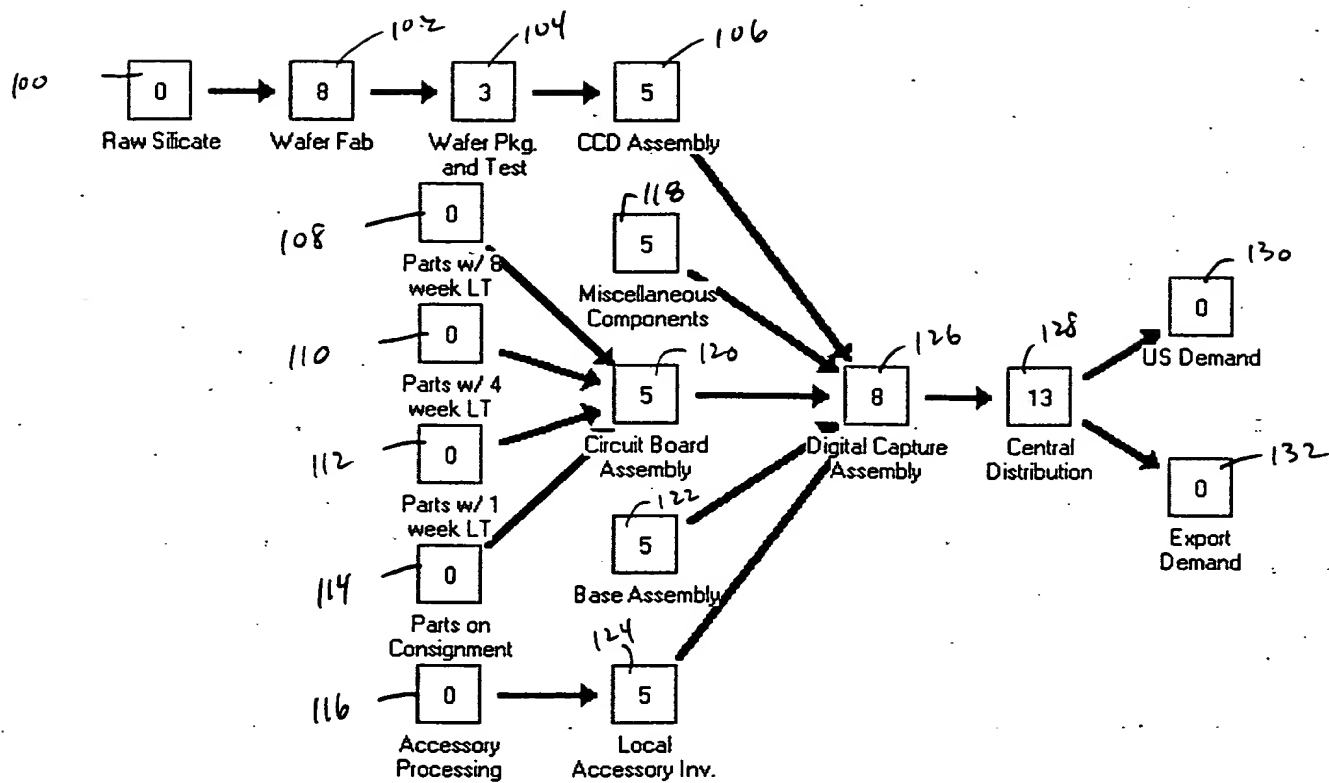


Fig. 12

```

graph LR
    100[20 Raw Silicate] --> 102[8 Wafer Fab]
    102 --> 104[5 Wafer Pkg. and Test]
    104 --> 106[2 CCD Assembly]
    106 --> 120[5 Digital Capture Assembly]
    108[0 Parts w/ 8 week LT] --> 120
    110[0 Parts w/ 4 week LT] --> 120
    112[0 Parts w/ 1 week LT] --> 120
    114[0 Parts on Consignment] --> 120
    116[40 Accessory Processing] --> 122[30 Base Assembly]
    122 --> 120
    118[30 Miscellaneous Components] --> 120
    120 --> 126[3 Digital Capture Assembly]
    126 --> 128[5 Central Distribution]
    128 --> 130[1 US Demand]
    128 --> 132[2 Export Demand]
  
```

Fig. 13

TOP SECRET 44-10500

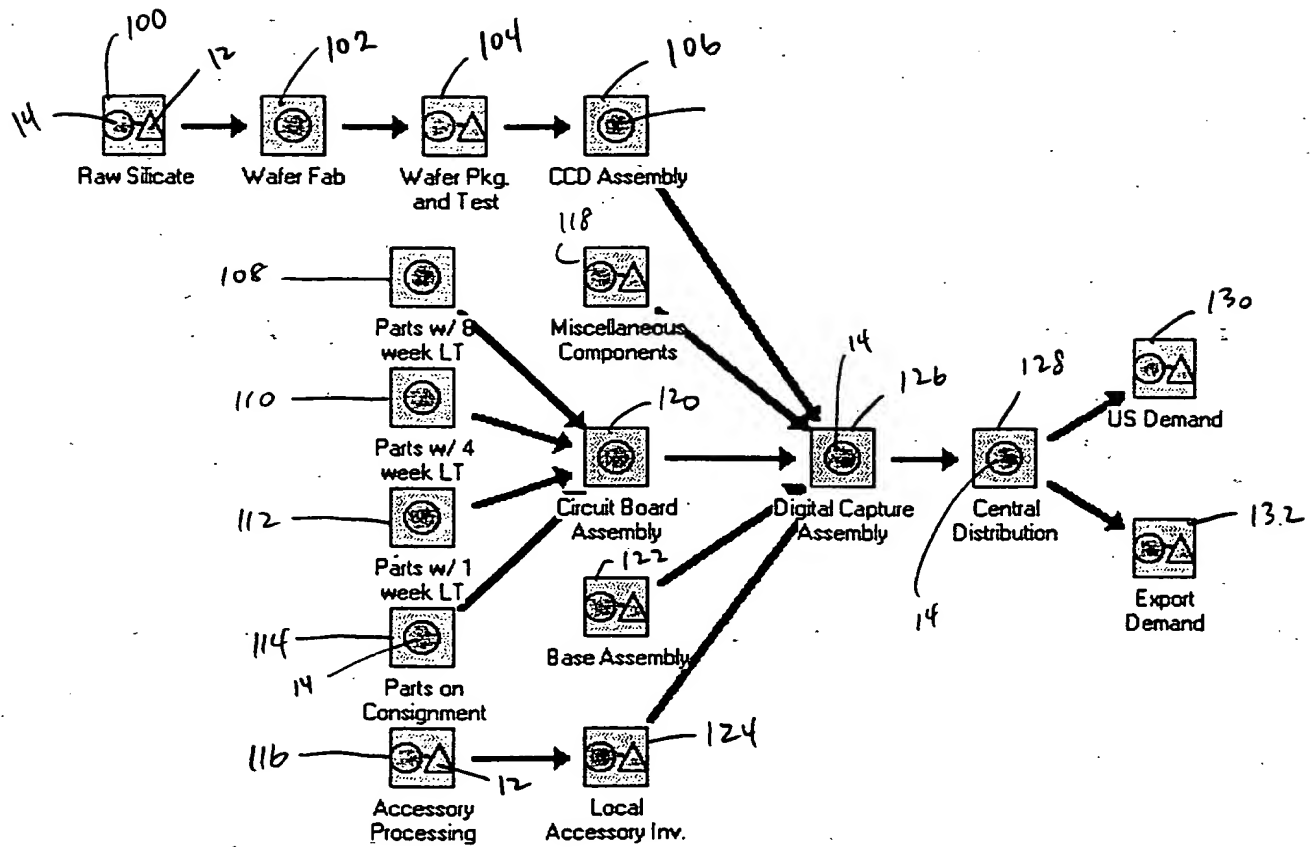


Fig. 14

TOP SECRET 44660

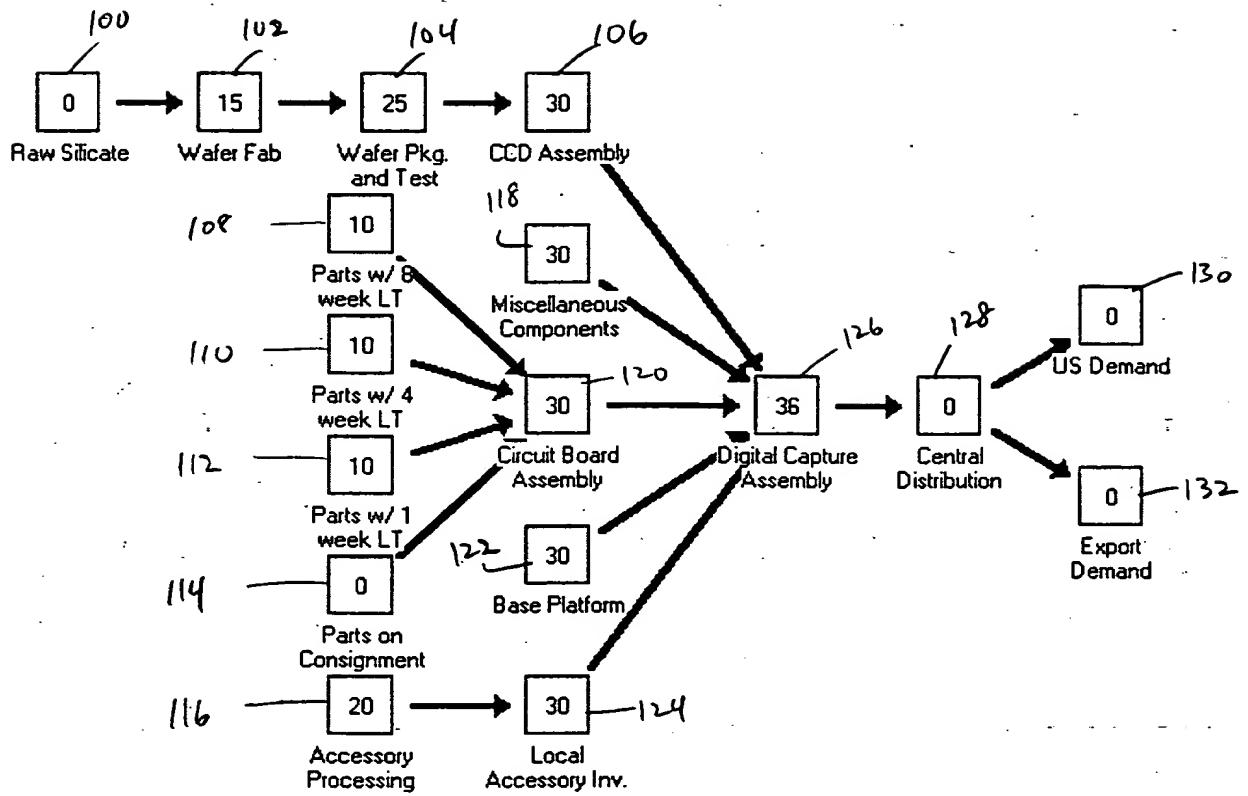


Figure 15

TISSOT 44.4.660

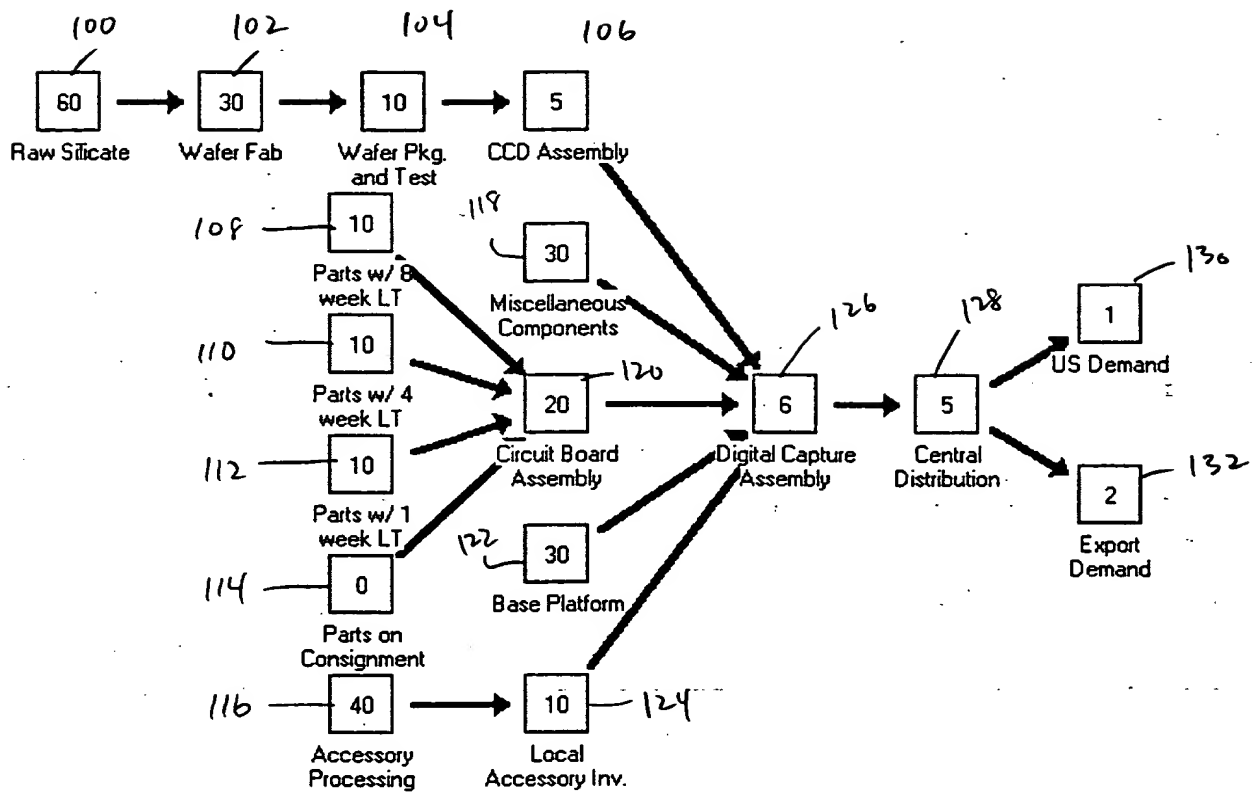


Figure 16

TOP SECRET 4446650

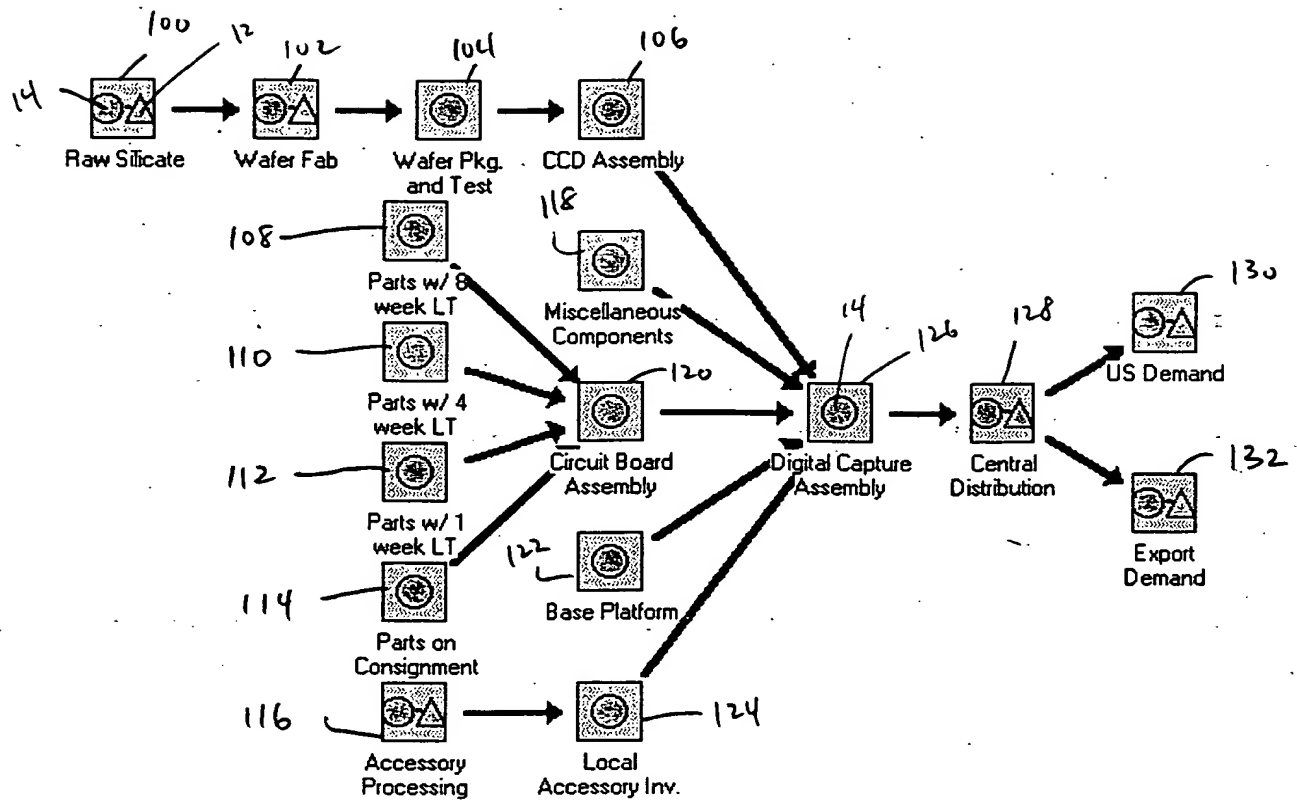


Figure 17

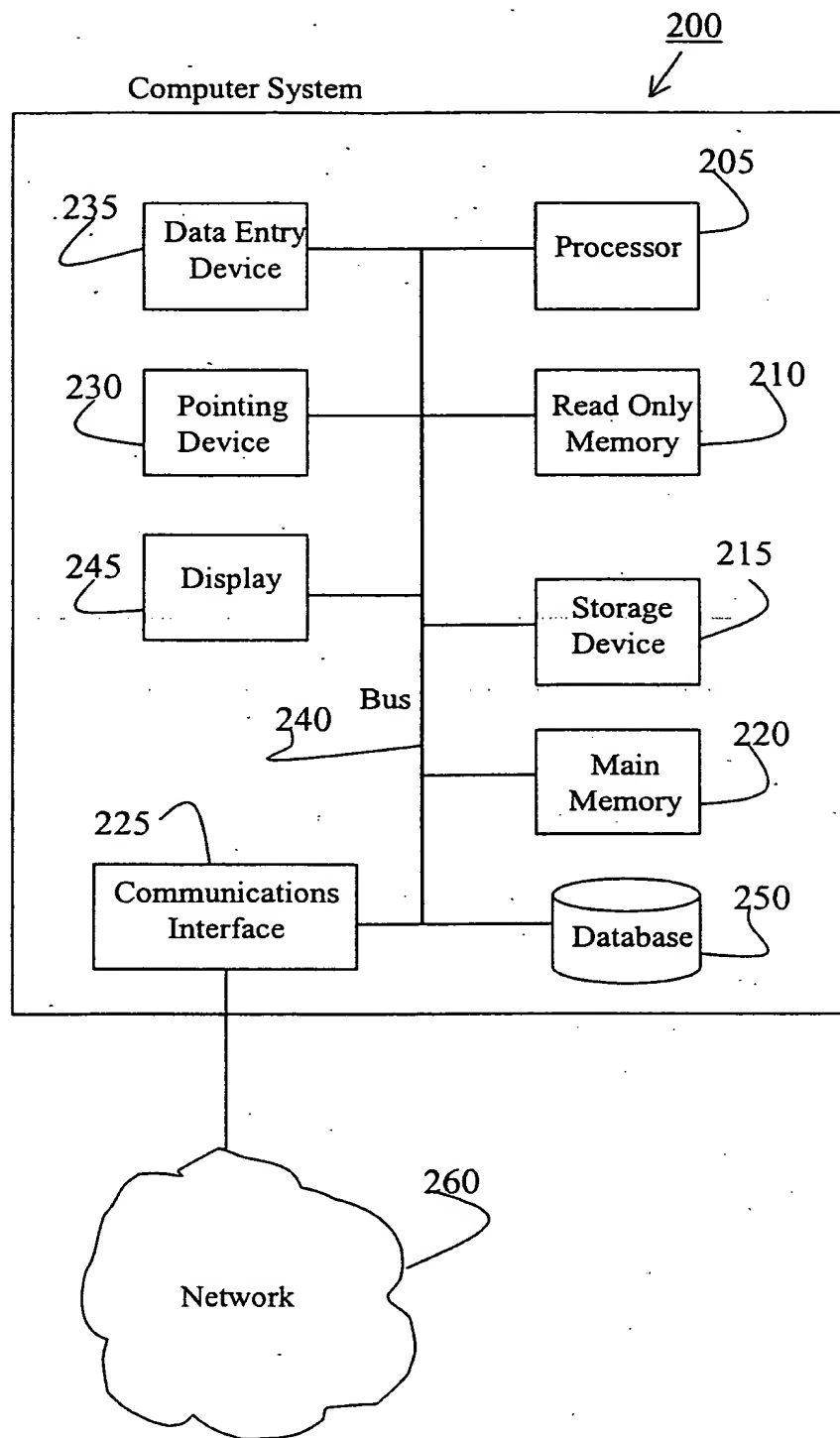


Fig. 18

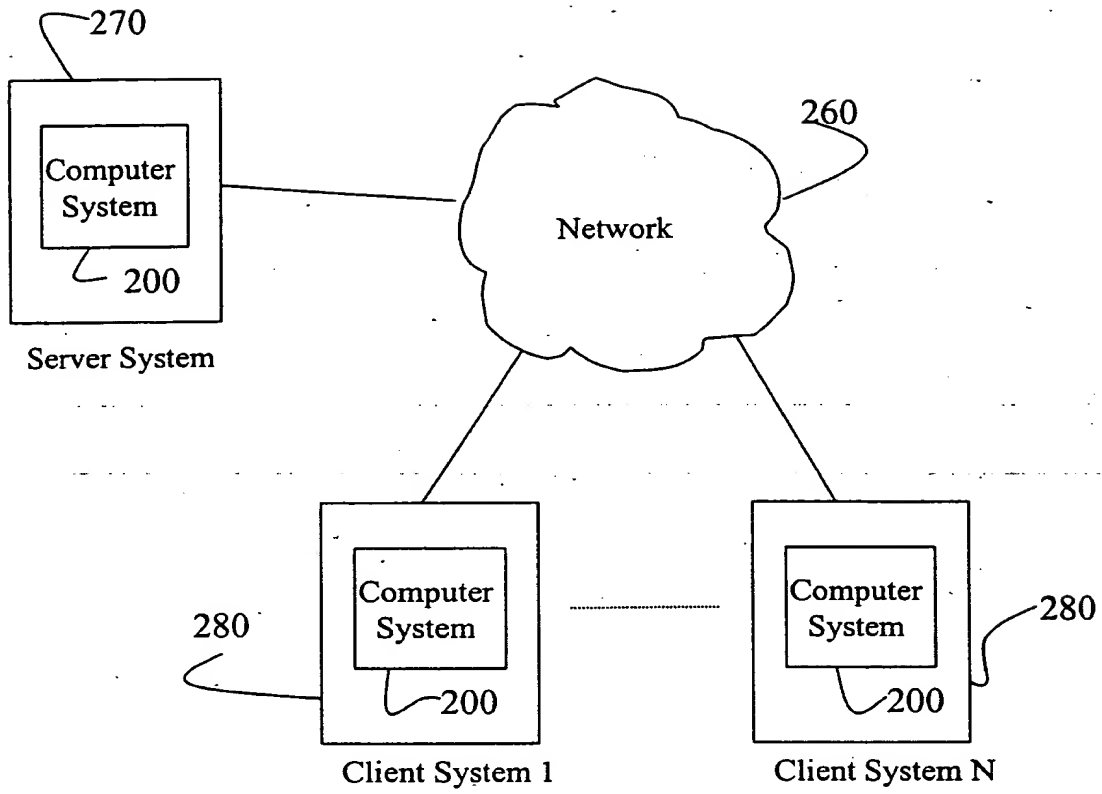


Fig. 19

optiant Eric Sample

optiant

View All Chains Create New Chain Users & Groups My Profile Download/Upload Log Out

7/25/2001 4:59 PM PowerChain Architect

VIEW ALL CHAINS

All Chains for Eric Sample

You may sort this table by clicking on the column headers. It is ready to be printed. Click on the Print icon to print this page.

Chain Name	Status	View Chain	Owner	Created	Last Change	Delete Chain
<input type="checkbox"/> Copy of PowerChain Architect Case Study Version 1	Checked Out Eric Sample	• Edit	Eric Sample	June 26, 2001 6:04 PM	July 25, 2001 2:49 PM	<input type="checkbox"/>
<input type="checkbox"/> New Supply Chain Version 1	Checked Out Eric Sample	• Edit	Eric Sample	July 25, 2001 2:49 PM	July 25, 2001 3:36 PM	<input type="checkbox"/>
<input type="checkbox"/> PowerChain Architect Case Study Version 4	Checked Out Eric Sample	• Edit	Murthy Mathiprakesam	June 14, 2001 9:28 AM	June 26, 2001 6:04 PM	<input type="checkbox"/>

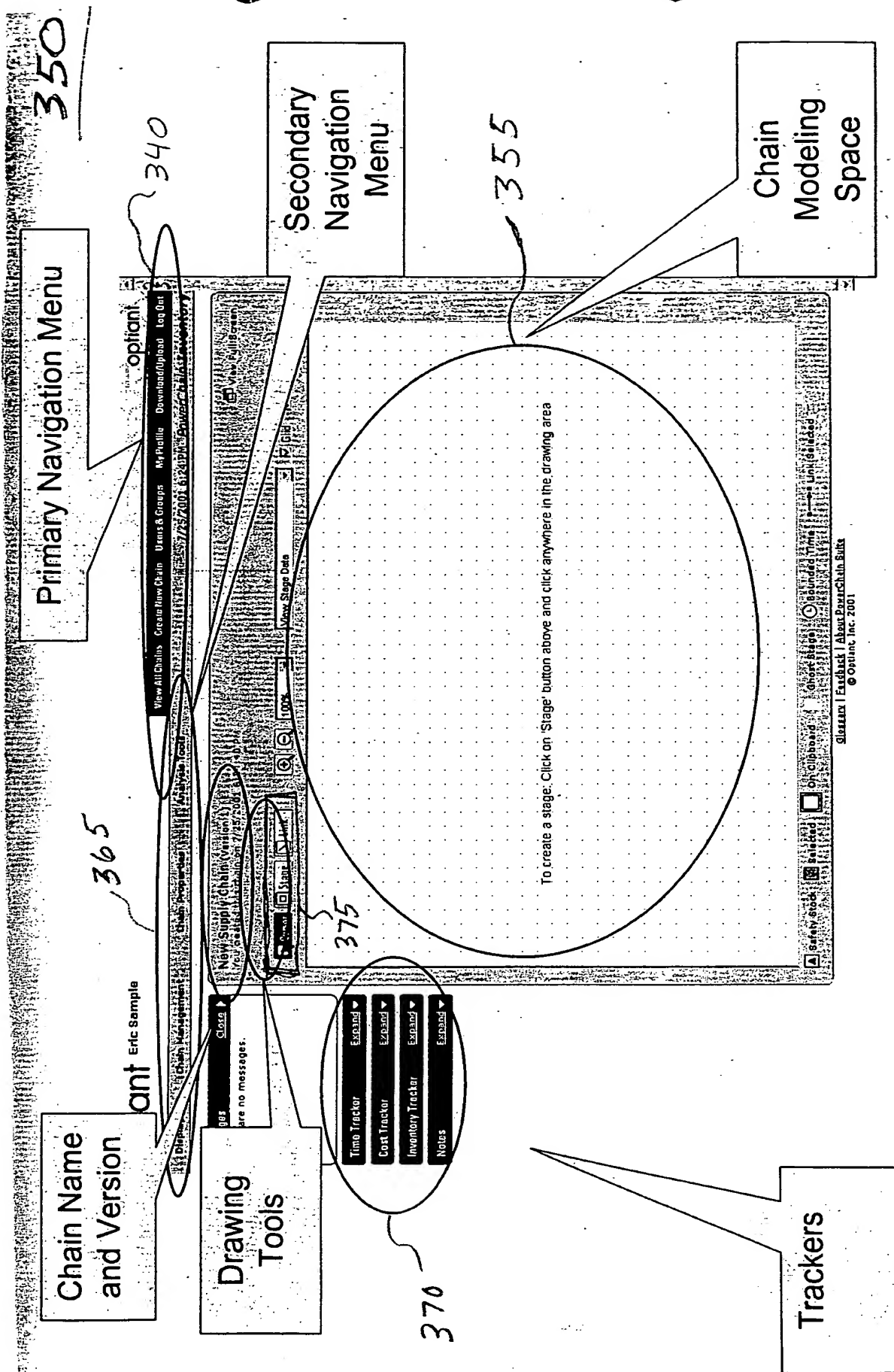
☐ Compare

☐ Delete Chain

PowerChain Architect
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← 300

Fig. 20



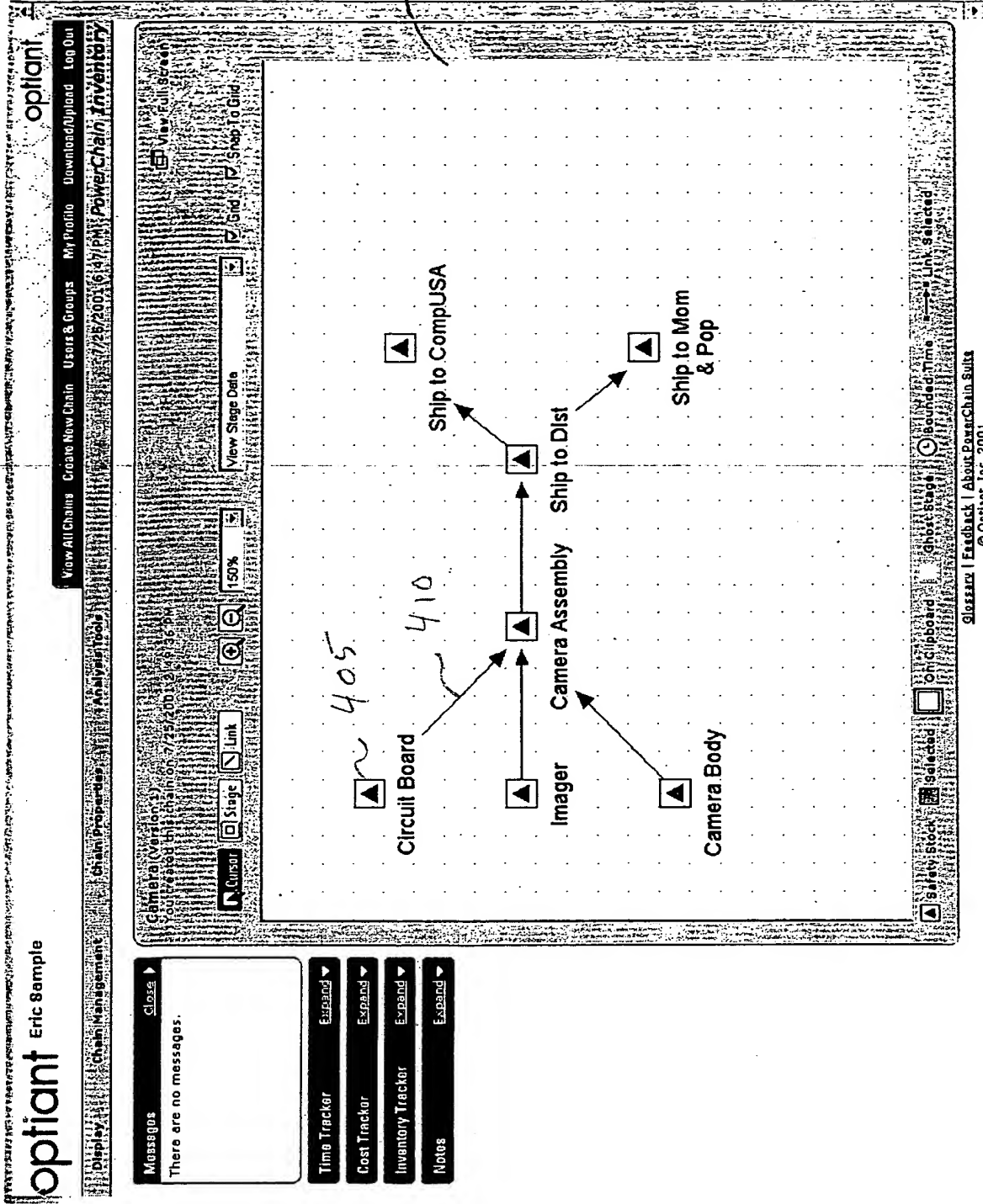


Fig. 22

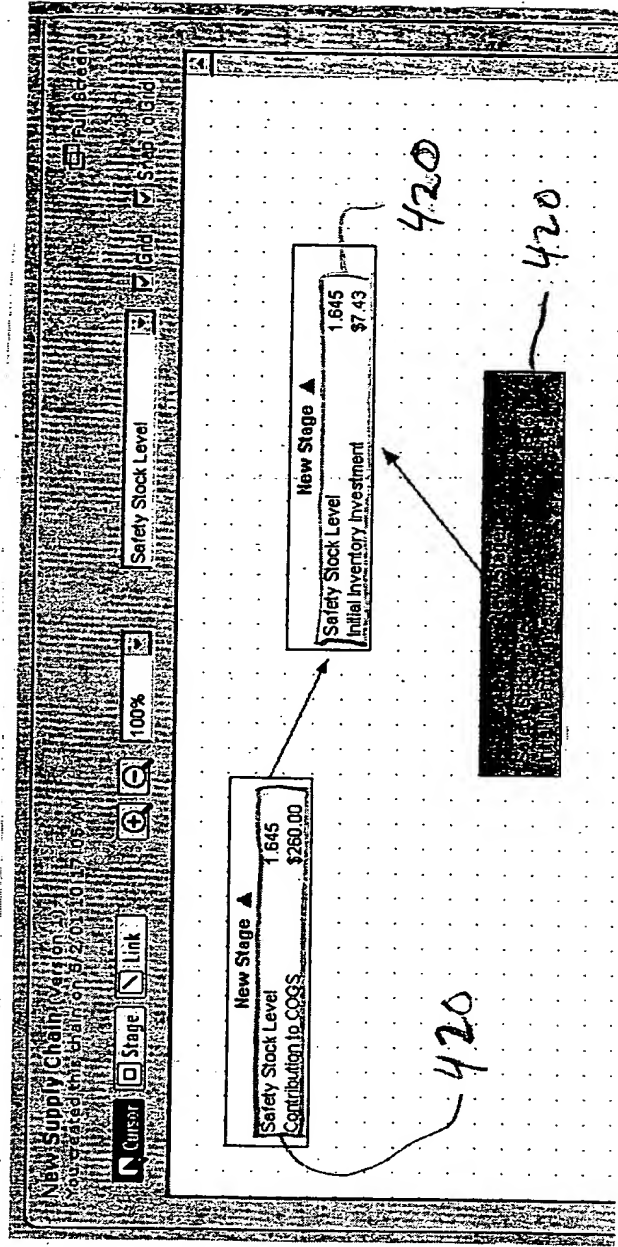


Fig. 23

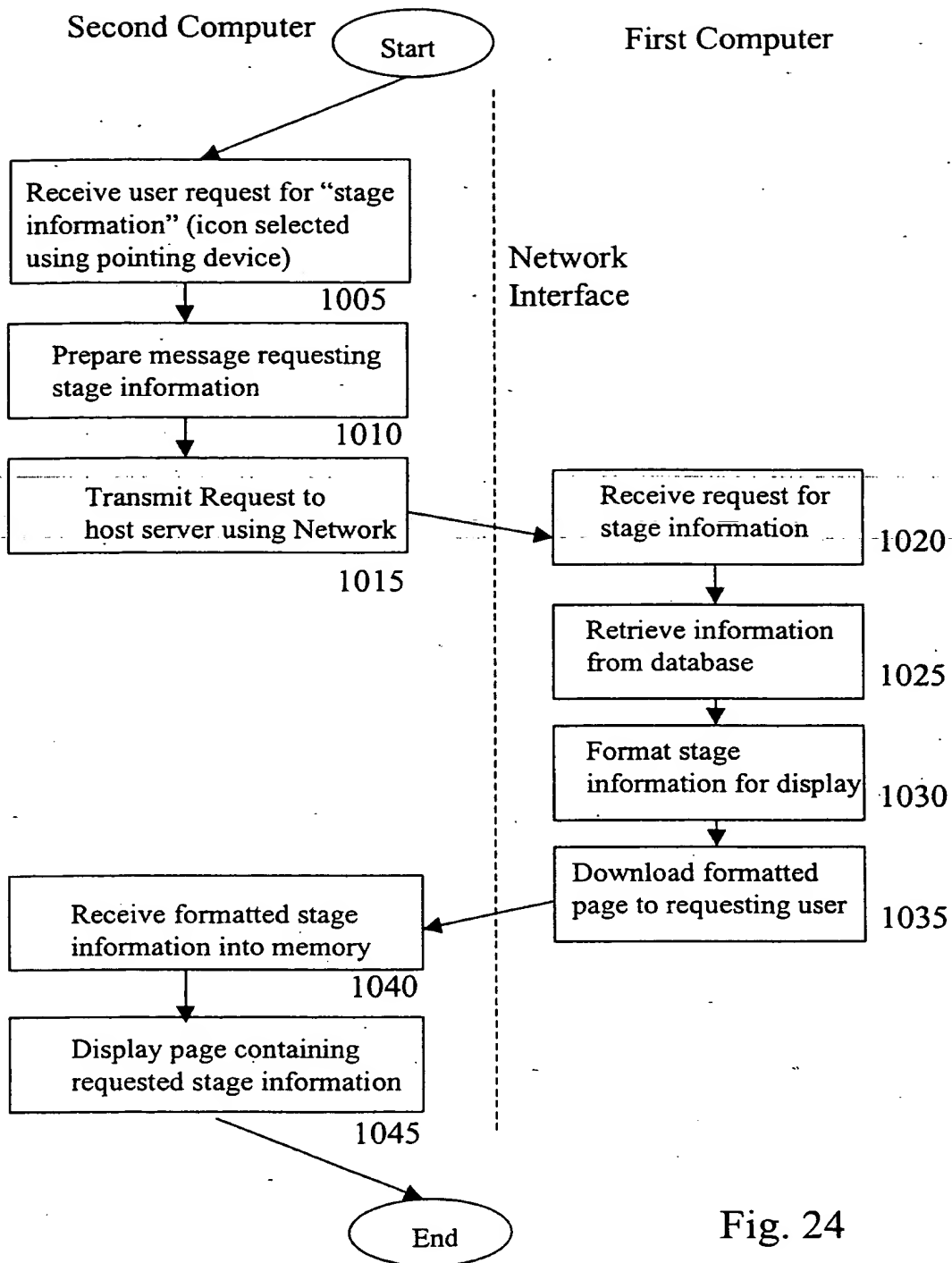


Fig. 24



optiant Eric Sample

optiant

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7/25/2001 5:14 PM Power/Chain Architect

Display Chain Management Chain Properties Analysis Tools

Messages Expand

STAGE REPORT

Click on the report to view the report details. The report details will be displayed in the main window. The report details will be displayed in the main window.

Stage Name	Option Time	Service Time	Option Cost	Class
New Stage	1	0	\$1.00	None Specified
New Stage	1	0	\$1.00	None Specified
New Stage	1	0	\$1.00	None Specified

Display

- The Stage Report is accessed by going to Display | Stage Report
- The Link Report is accessed by going to Display | Link Report
- Allows rapid entry of stage information and rapid deletion of stages and links respectively

Options Summary

PowerChain Architect: New Supply Chain - Microsoft Internet Explorer

Stage Name: Distribution Close Save

Options Summary		Options Detail		Option Report		Stage Properties	
Option Name	Total Option Time (in days)	Total Option Cost	Holding Cost Rate	Include in optimization?	Currently Selected	Details	
Air Ship	1	\$10	20%	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	View/Edit	
New Option	1	\$5	20%	<input checked="" type="checkbox"/>	<input type="radio"/>	View/Edit	

Add Option

Notes/Description:

600



Click to add more options	Total lead time of the option	Total cost of the option	Creation and Last Change Information	Whether to consider this option during optimization	Optimization selects the best option
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Fig. 26

Option Report Tab

PowerChain Architect: New Supply Chain - Microsoft Internet Explorer

Stage Name: Distribution Close Save

Options Summary Options Detail **Option Report** Stage Properties

A Stage Report shows a table of all the inputs and calculations for this stage, depending on which report is chosen. Every option gets calculated as if it were the currently selected option.

Options Included in Stage:

Air Ship
New Option

Select the report you would like to see:

☐ Time Values
☐ Inventory Levels
☐ Cost Values
☒ Show all Values

Create Report

650

Select which values you want displayed

Stage Properties Summary Tab

PowerChain Architect: New Supply Chain - Microsoft Internet Explorer

Stage Name: Distribution Close Save

Options Summary	Options Detail	Option Report
Summary	Service	Demand
Cumulative Cost	\$1.00	
Safety Stock Cost	\$0.33	
Pipeline Stock Cost	\$0.20	
Total Stock Cost	\$0.53	
Total Inventory Investment	\$2.64	
Contribution to COGS	\$260.00	
Safety Stock Level (in units)	1.64	
Pipeline Stock Level (in units)	1.00	
Total Stock Level (in units)	2.64	
Longest Path Through Stage (in days)	1	
Stage Turnover Time (in days)	3	

All calculations are based on the currently selected option.

Include Stage in Optimization? ☐ Yes ☒ No

Include Stage in Cost Calculations? ☐ Yes ☒ No

Include Stage in Time Calculations? ☐ Yes ☒ No

Stage Class: None Specified View Stage Permissions

Stage Notes/Description:

Cost Metrics	Inventory Metrics	Time Metrics	Specify whether the stage affects optimization or calculations	Classify the stage into an echelon
---------------------	--------------------------	---------------------	-----------------------------------------------------------------------	-------------------------------------------

700
✓

Stage Properties Demand Tab

PowerChain Architect: New Supply Chain - Microsoft Internet Explorer

Stage Name: Distribution

Options Summary Options Detail Option Report Stage Properties

Summary Service Demand

View Demand Matrix in Full Screen Mode

Average Demand

Variability ☒ Standard Deviation ☐ Coefficient of Variation 100%

Service Level %

Power %

Number of days out to show:

Stage Notes/Description

View Demand Matrix

Average Demand

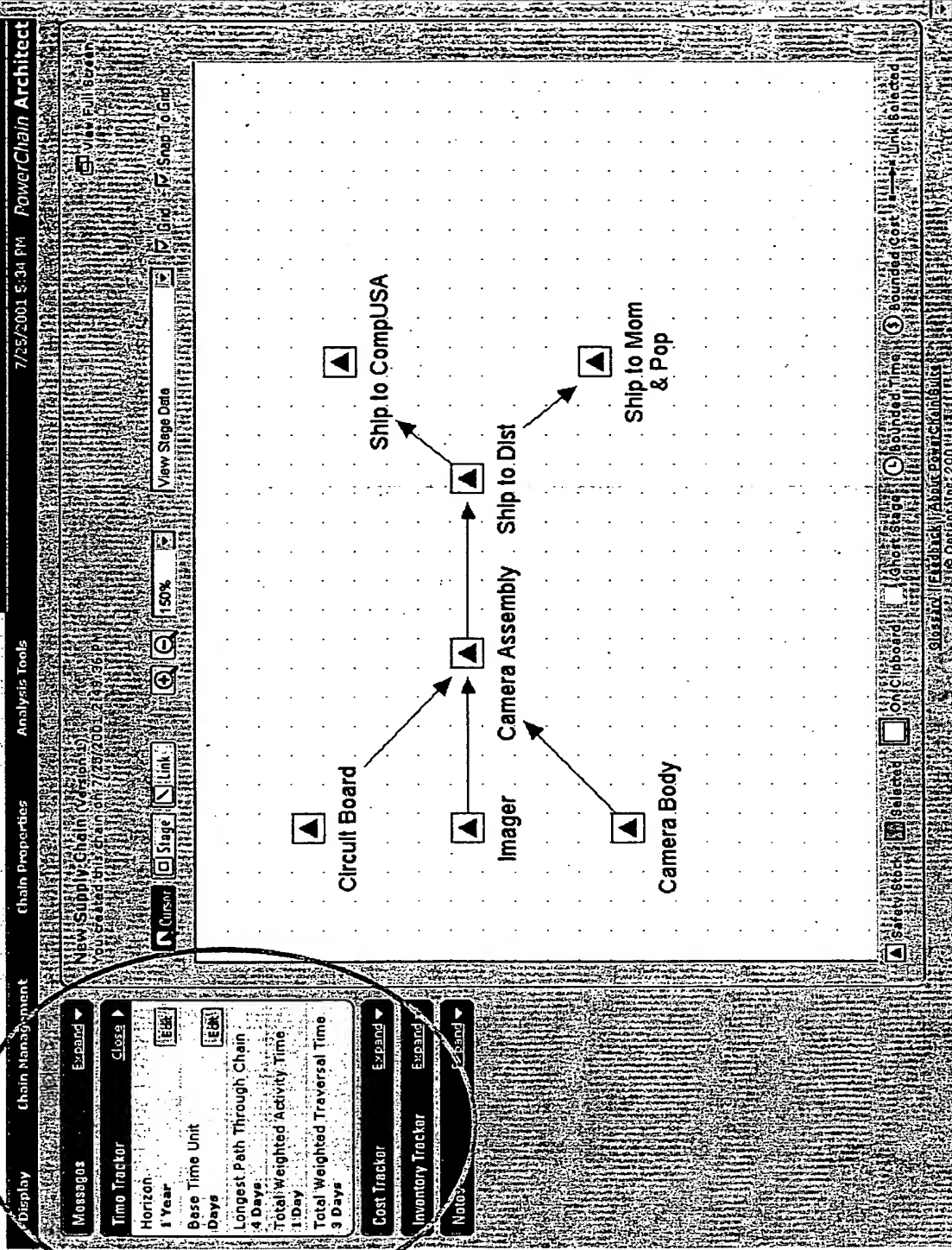
Uncertainty of Demand

End Customer Service Level

View Demand Matrix

Time Tracker

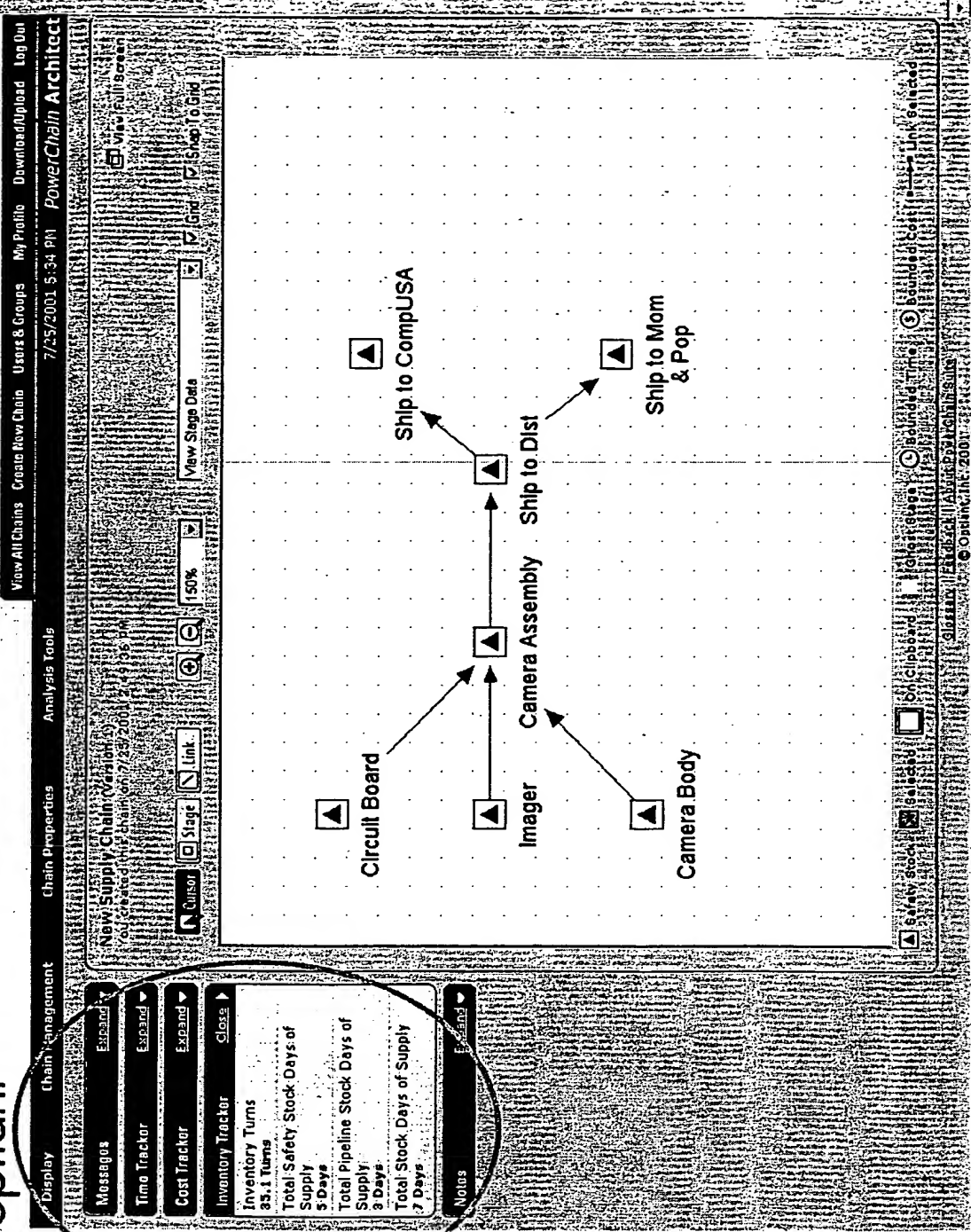
optiant Eric Sample



Inventory Tracker

optiant Eric Sample

optiant



optiant
Eric Sample

optiant

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6/26/2001 6:05 PM PowerChain Architect

COMPARE CHAINS

Name	Total Safety Stock Cost	Total Pipeline Stock Cost	Total Cost	Total Inventory Investment	Total Cost of goods sold	Total Supply Chain Cost	Weighted Unit Cost	Total Safety Stock Level	Total Inventory Turns	Total Cycle Time	Base Time Unit	Horizon Time Unit	Number of Stages
Copy of PowerChain Architect Case Study	\$164,005.14	\$594,601.66	\$758,606.82	\$2,427,674.61	\$17,872,712.00	\$18,631,318.82	\$3,617.96	410.87	7.36	120	day	year	17
PowerChain Architect Case Study	\$137,511.21	\$427,612.86	\$565,124.07	\$1,921,746.91	\$17,848,012.00	\$18,413,136.07	\$3,612.96	402.30	9.29	113	day	year	16

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Fig. 33

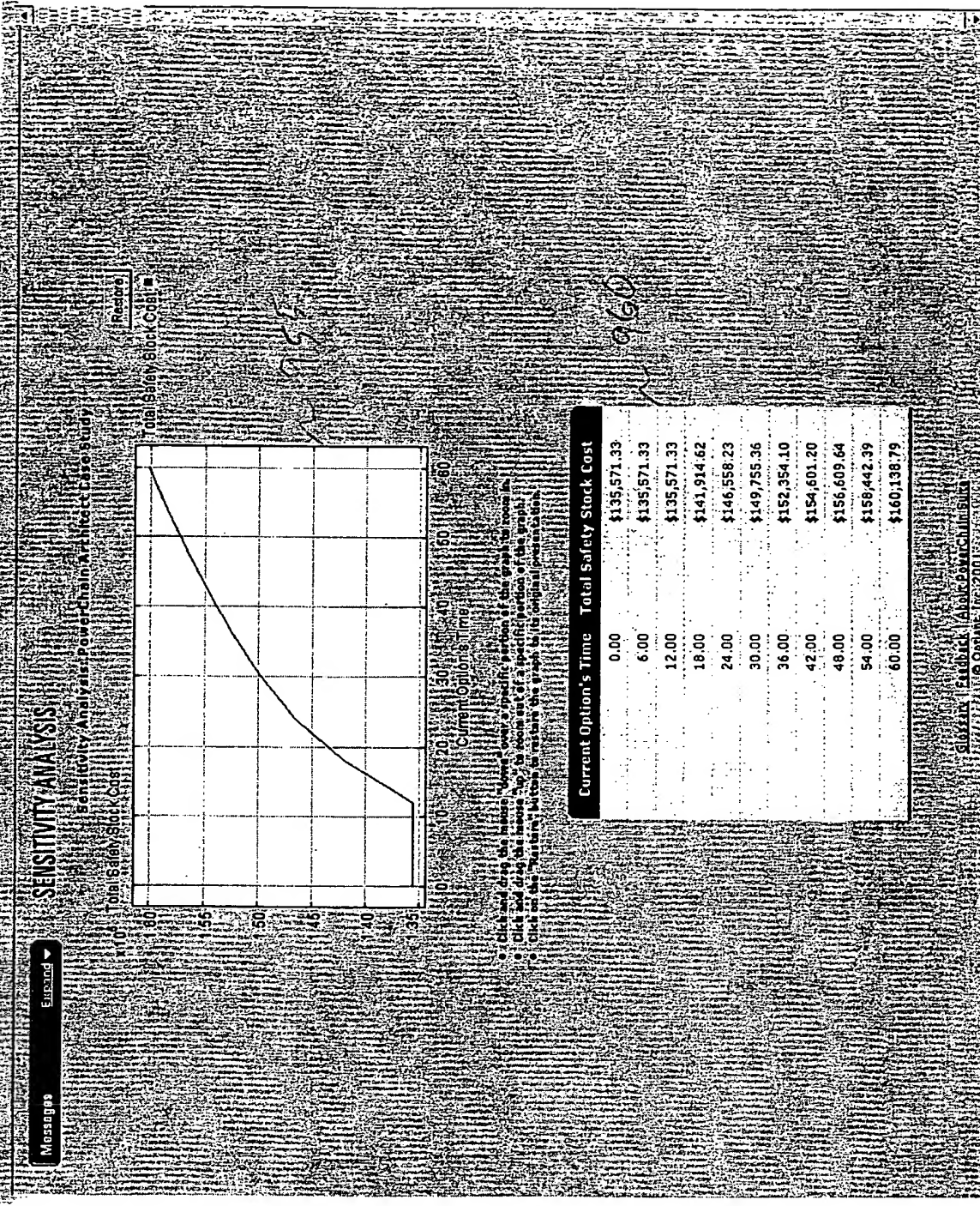
900
↙

32905
210
915

950



Fig. 34



1100

Second Computer

First Computer

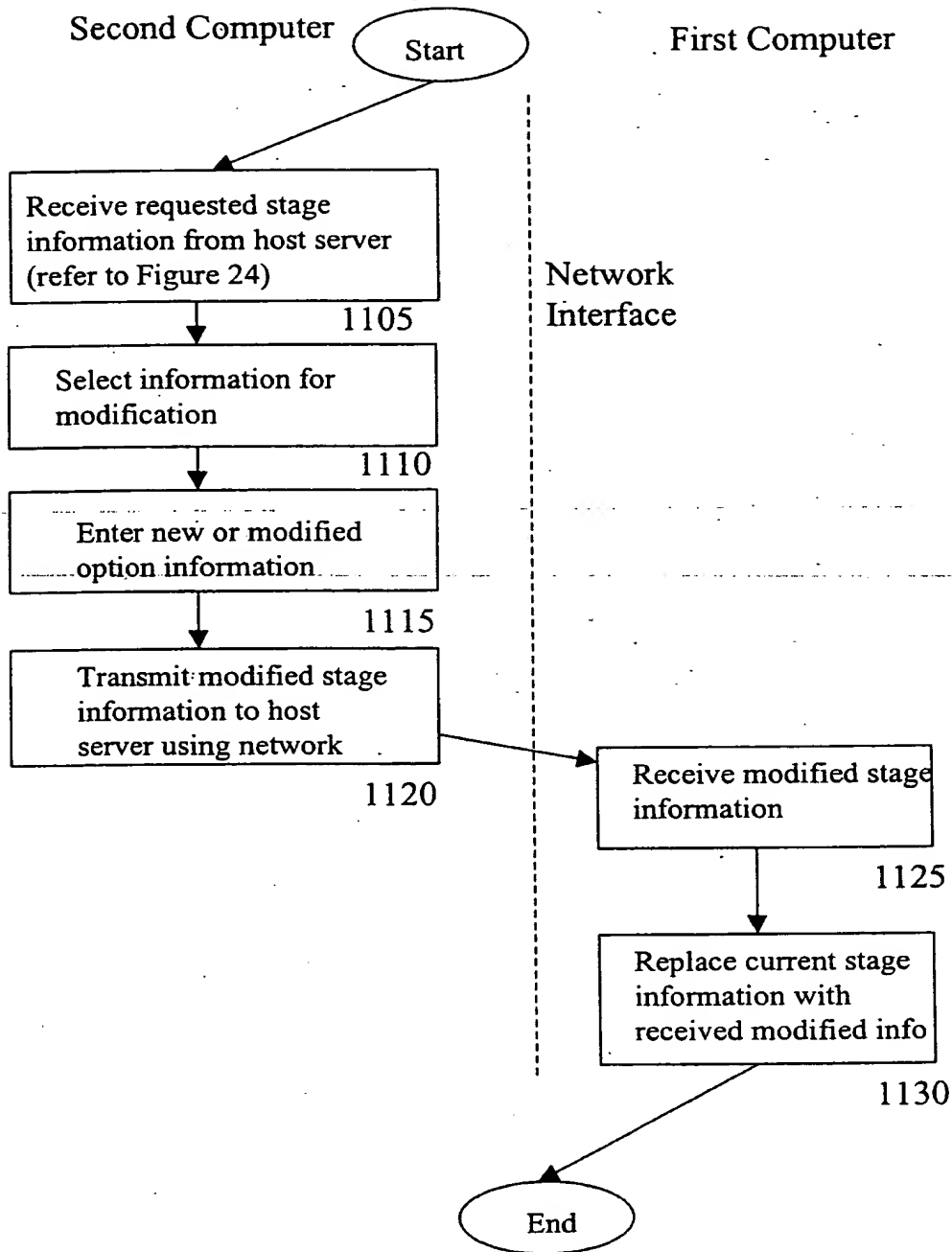


Fig. 35

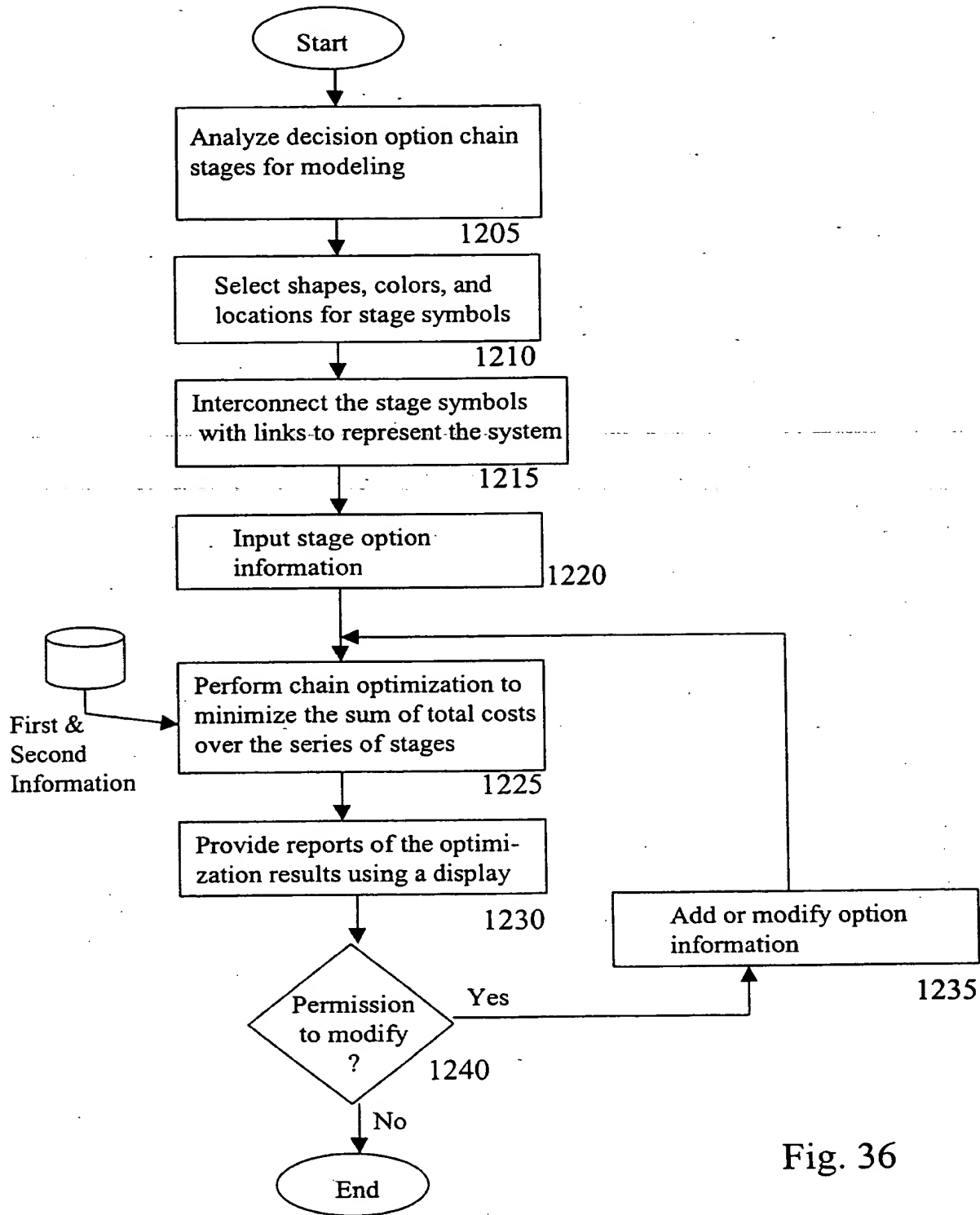


Fig. 36

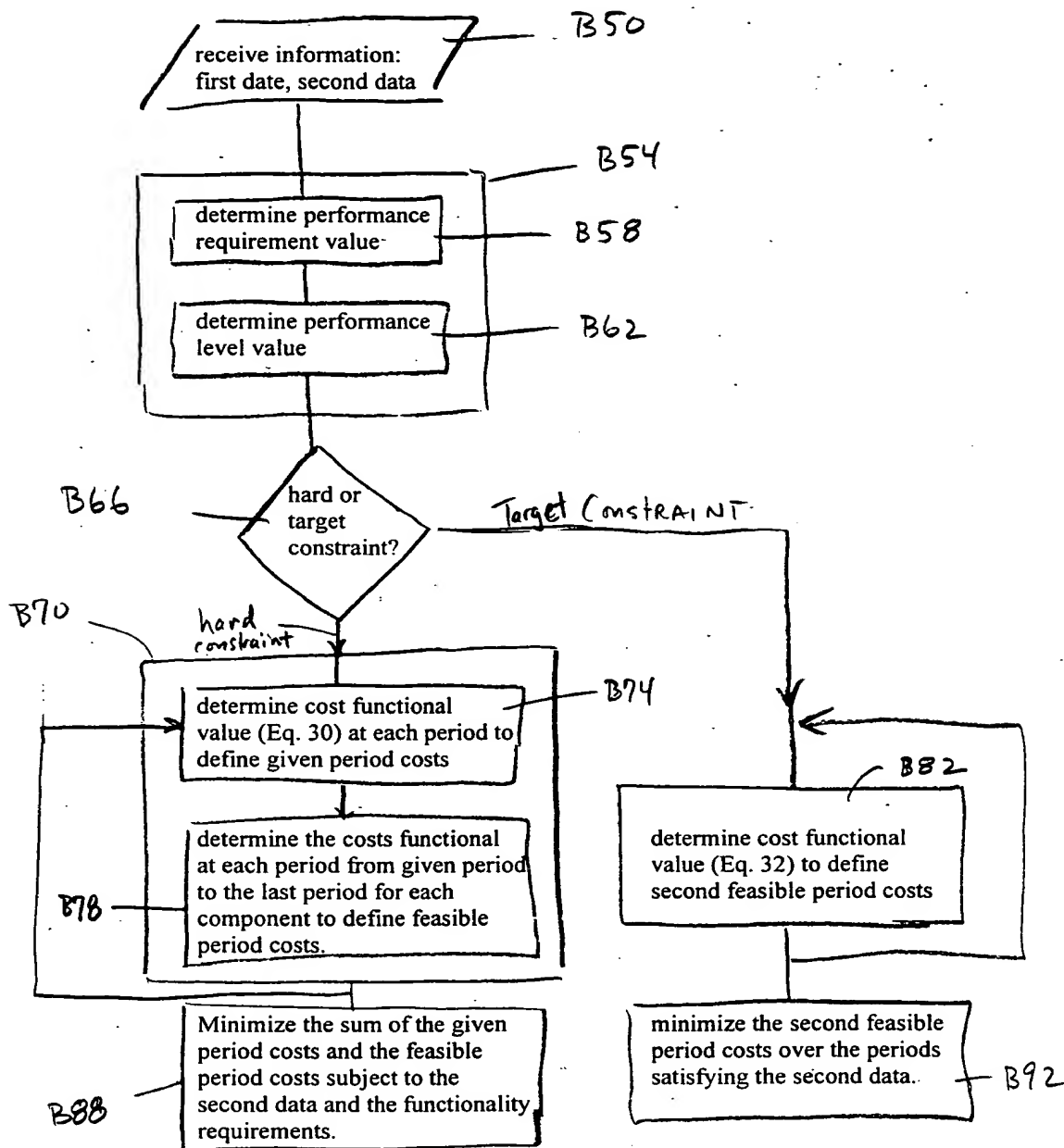


Figure 37

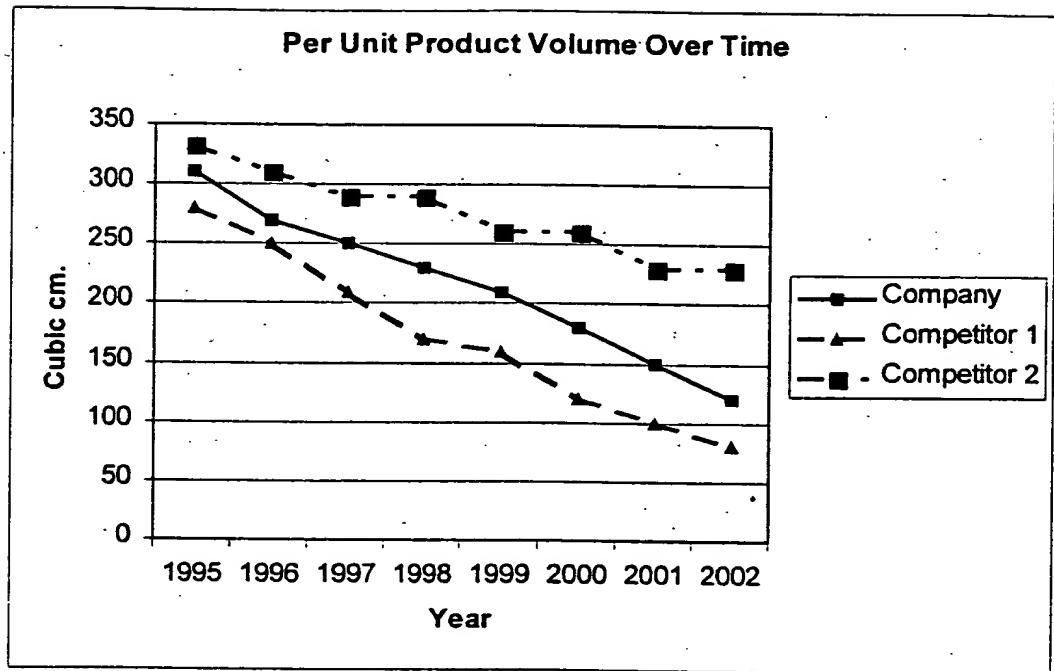


Fig. 38 Chart showing product volumes over time

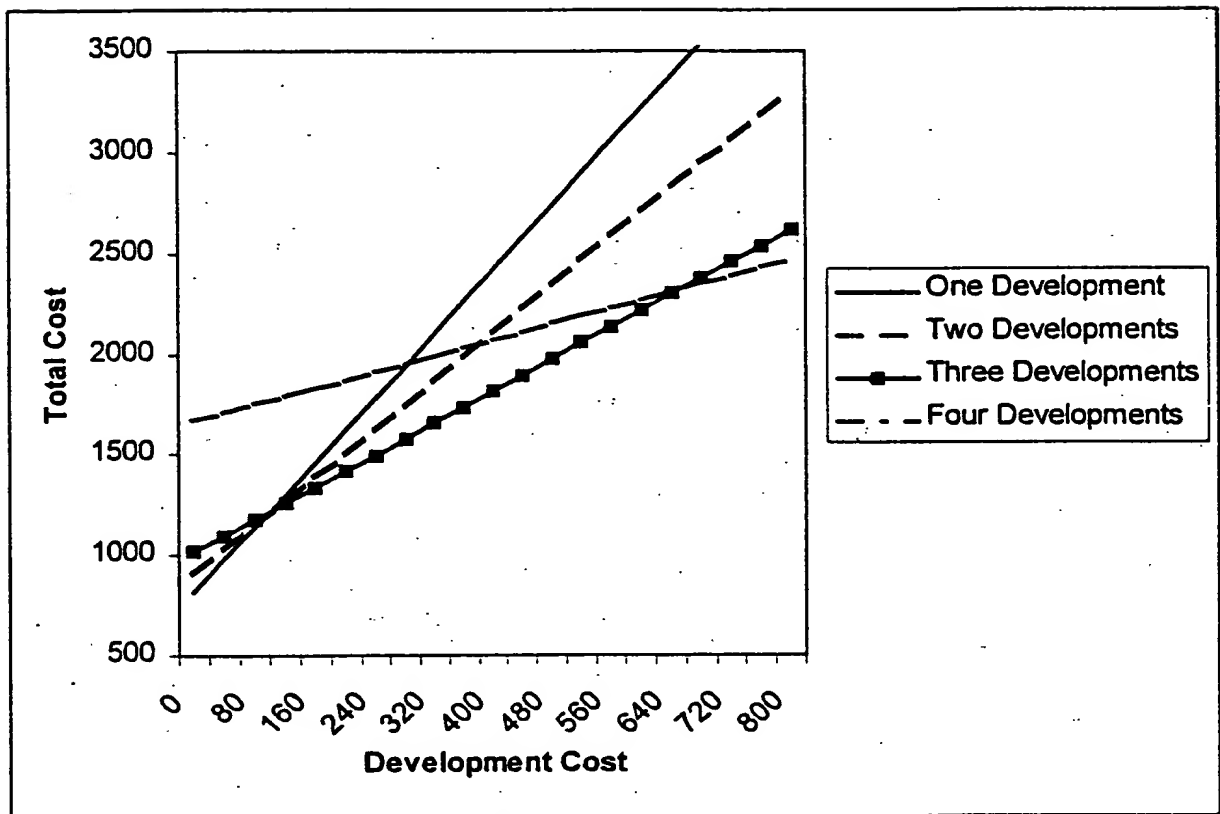


Fig. 39: Graphical Depiction of Efficient Frontier